Jian Gao

Contact Information

Affiliation **Kellogg School of Management, Northwestern University** ☎ : +1 (617)-500-3208
Center for Science of Science & Innovation (CSSI) ✉ : jian.gao1@northwestern.edu
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Research Interests

Summary My interdisciplinary research lies in the burgeoning fields of the ***Science of Science*** and ***Computational Social Science***. I use large-scale data and develop computational tools from complexity sciences and artificial intelligence (AI) to study social and economic systems. I have published **20+ papers** in peer-reviewed journals including ***Science***, ***Nature***, ***Physics Reports***, ***Nature Communications***, *J. R. Soc. Interface*, *Regional Studies*, and others.

Citation Impact My works have received in total **1273 citations**, with **H-index: 18** (by Google Scholar)

Keywords Computational Social Science, Science of Science, Network Science, Complex Social Systems, AI for Science, Applied Data Science, Economic Geography, Biomedical Informatics

Academic Positions

Northwestern University (NU) Evanston, IL, USA

2021/09-Present Research Assistant Professor, Kellogg School of Management
Center for Science of Science & Innovation (CSSI)

2019/09-2021/08 Postdoctoral Research Fellow, Kellogg School of Management, CSSI & NICO
Mentor: Prof. Dashun Wang

Massachusetts Institute of Technology (MIT) Cambridge, MA, USA

2016/09-2017/09 Research Assistant, Collective Learning Group, The MIT Media Lab
Mentor: Prof. César A. Hidalgo

Boston University (BU) Boston, MA, USA

2016/02-2016/04 Visiting Scholar, Department of Physics, Center for Polymer Studies
Mentor: Prof. H. Eugene Stanley

University of Electronic Science and Technology of China Chengdu, China

2014/09-2019/07 Research Assistant, CompleX Lab & Big Data Research Center

Five Representative Publications

[1] Yi Cao, Tao Zhou† & **Jian Gao**†. Heterogeneous peer effects of college roommates on academic performance. ***Nature Communications***, 2024. (†: Corresponding author)

[2] **Jian Gao**, Yian Yin, Kyle R. Myers, Karim R. Lakhani & Dashun Wang. Potentially long-lasting effects of the pandemic on scientists. ***Nature Communications***, 2021. (Top 25 Social Sciences and Human Behaviour Articles published in *Nature Communications* 2021)

[3] Yian Yin‡, **Jian Gao**‡, Benjamin F. Jones & Dashun Wang. Coevolution of policy and science during the pandemic. ***Science***, 2021. (‡: contributed equally, co-first authorship)

[4] **Jian Gao**, Bogang Jun, Alex S. Pentland, Tao Zhou & César A. Hidalgo. Spillovers across industries and regions in China's regional economic diversification. ***Regional Studies***, 2021.

[5] **Jian Gao**, Yi-Cheng Zhang & Tao Zhou. Computational socioeconomics. ***Physics Reports***, 2019. (A Review Section of Physics Letters; 5-Year Journal Impact Factor: 32.514)

Education

2014/09-2019/07 **University of Electronic Science and Technology of China** Chengdu, China
Ph.D. in *Computer Science*. School of Computer Science and Engineering
Thesis title: Research on the spatial structure and dynamics of socio-economic systems
Advisor: Prof. Tao Zhou

2016/09-2017/09 **Massachusetts Institute of Technology (MIT)** Cambridge, MA, USA
Visiting graduate student in *Media Arts & Sciences*. The MIT Media Lab
Advisor: Prof. César A. Hidalgo

2012/09-2014/08 **University of Electronic Science and Technology of China** Chengdu, China
Master student in *Computer Science*. School of Computer Science and Engineering
Advisor: Prof. Tao Zhou

2008/09-2012/07 **University of Electronic Science and Technology of China** Chengdu, China
B.Sc. in *Information and Computing Science*. School of Mathematical Sciences
GPA: 88.6/100 (3.88/4)

Publications (Full List)

Summary Published 27 journal articles, 3 conference papers, 3 book chapters, and 5 working papers
These works received in total **1200+ citations**, with **H-index: 18** (by Google Scholar)

‡ : equal contribution † : corresponding author Profiles:

Under Review / Pre-Print

[5] **Jian Gao** & Dashun Wang. Quantifying the benefit of artificial intelligence for scientific research. arXiv:2304.10578, 2024.

[4] Zhongtao Yue, Tao Zhou, Yan-Li Lee, Qian-Ming Zhang & **Jian Gao**. Undergraduate-to-graduate student mobility reveals academic hierarchy and educational disparities, 2023.

[3] Qian Qu, Quan-Hui Liu, **Jian Gao**, Shudong Huang, Wentao Feng, Zhongtao Yue, Xin Lu, Tao Zhou, Jiancheng Lv. Gender differences in resume language and gender gaps in salary expectations, 2023.

[2] **Jian Gao**‡, Yian Yin‡, Benjamin F. Jones & Dashun Wang. Quantifying policy responses to a global emergency: Insights from the COVID-19 pandemic. arXiv:2006.13853, 2020. Part of this pre-print has been published in ***Science*** (2021). (‡: equal contribution)

[1] **Jian Gao**, Bogang Jun, Alex 'Sandy' Pentland, Tao Zhou & César A. Hidalgo. Collective learning in China's regional economic development. arXiv:1703.01369, 2017. Part of this pre-print has been published in ***Regional Studies*** (2021). [Citation: 35 times.]

Journal Article

[27] Yi Cao, Tao Zhou† & **Jian Gao**†. Heterogeneous peer effects of college roommates on academic performance. ***Nature Communications***, 2024. DOI: 10.1038/s41467-024-49228-7. (†: corresponding author).

[26] **Jian Gao**, Yian Yin, Kyle R. Myers, Karim R. Lakhani & Dashun Wang. Potentially long-lasting effects of the pandemic on scientists. ***Nature Communications***, 12:6188, 2021. (Year 2021 Top 25 Social Sciences and Human Behaviour Articles published in *Nature Communications*; Ranked #3 by total accesses).

[25] Luo-Luo Jiang†, **Jian Gao**†, Zhi Chen†, Wen-Jing Li & Jürgen Kurths. Reducing the bystander effect via decreasing group size to solve the collective-risk social dilemma. ***Applied Mathematics and Computation***, 410: 126445, 2021. (†: corresponding author).

[24] **Jian Gao**†, Bogang Jun, Alex 'Sandy' Pentland, Tao Zhou & César A. Hidalgo†. Spillovers across industries and regions in China's regional economic diversification. ***Regional Studies***, 55(7): 1311-1326, 2021. (†: corresponding author).

[23] Yian Yin‡, **Jian Gao**‡, Benjamin F. Jones & Dashun Wang. Coevolution of policy and science during the pandemic. ***Science***, 371(6525): 128–130, 2021. (‡: equal contribution).

[22] Bogang Jun, Aamena Alshamsi, **Jian Gao** & César A. Hidalgo. Bilateral relatedness: Knowledge diffusion and the evolution of bilateral trade. ***Journal of Evolutionary Economics***. 30: 247–277, 2020.

[21] **Jian Gao**, Yi-Cheng Zhang & Tao Zhou. Computational socioeconomics. ***Physics Reports***, 817: 1–104, 2019. (A *Review* Section of Physics Letters; Impact Factor: 30.510]

[20] **Jian Gao**† & Tao Zhou. Stamp out fake peer review. ***Nature***, 546(7656): 33–33, 2017. (Correspondence opinion piece; Replied by T. Welschot. *Nature*, 546(7657): 210-210, 2017).

[19] Jun Wang, **Jian Gao**†, Jin-Hu Liu, Dan Yang & Tao Zhou. Regional economic status inference from online information flow and offline talent mobility. ***EPL (Europhysics Letters)***, 125(6): 68002, 2019. (*EPL* Highlights of 2019; †: corresponding author).

[18] Yi Cao‡, **Jian Gao**‡, De-Fu Lian, Zhi-Hai Rong, Jia-Tu Shi, Qing Wang, Yi-Fan Wu‡, Hua-Xiu Yao‡ & Tao Zhou‡. Orderliness predicts academic performance: Behavioral analysis on campus lifestyle. ***Journal of the Royal Society Interface***, 15: 20180210, 2018. (‡: equal contribution)

[17] **Jian Gao**† & Tao Zhou. Quantifying China's regional economic complexity. ***Physica A: Statistical Mechanics and its Applications***, 492: 1591, 2018. (†: corresponding author).

[16] Xiao Yang, **Jian Gao**†, Jin-Hu Liu & Tao Zhou. Height conditions salary expectations: Evidence from large-scale data in China. ***Physica A: Statistical Mechanics and its Applications***, 501: 86–97, 2018. (†: corresponding author).

[15] **Jian Gao**† & Tao Zhou. Evaluating user reputation in online rating systems via an iterative group-based ranking method. ***Physica A: Statistical Mechanics and its Applications***, 473: 546–560, 2017. (†: corresponding author).

[14] Qing Wang, **Jian Gao**, Tao Zhou, Zheng Hu & Hui Tian. Critical size of ego communication networks. ***EPL (Europhysics Letters)***, 114(5): 58004, 2016.

[13] **Jian Gao**, Tao Zhou & Yanqing Hu. Bootstrap percolation on spatial networks. ***Scientific Reports***, 5: 14662, 2015.

[12] **Jian Gao**, Yu-Wei Dong, Ming-Sheng Shang, Shi-Min Cai & Tao Zhou. Group-based ranking method for online rating systems with spamming attacks. ***EPL (Europhysics Letters)***, 110(2): 28003, 2015.

[11] **Jian Gao**† & Tao Zhou. Big data reveal the status of economic development. *Journal of UESTC*, 45(4): 625–633, 2016. In Chinese. (†: corresponding author).

[10] Ling-Jiao Chen & **Jian Gao**†. A trust-based recommendation method using network diffusion processes. ***Physica A: Statistical Mechanics and its Applications***, 506: 679–691, 2018. (†: corresponding author).

[9] Ling-Jiao Chen, Zi-Ke Zhang, Jin-Hu Liu, **Jian Gao**† & Tao Zhou. A vertex similarity index for better personalized recommendation. ***Physica A: Statistical Mechanics and its Applications***, 466: 607–615, 2017. (†: corresponding author).

[8] Jun Wang, **Jian Gao**, Xiao Yang, Jin-Hu Liu & Tao Zhou. Online data reveal key factors on salary expectation. *Journal of UESTC*, 48(2): 307–314, 2019. In Chinese.

[7] Wei-Jie You, **Jian Gao** & Tao Zhou. Application of carrier data on precise poverty alleviation and emergency management. *Journal of UESTC*, 20(6): 83–88, 2018. In Chinese.

[6] Linyan Zhang, **Jian Gao**, Xiang Hong & Tao Zhou. Human resource management based on big data. ***Big Data Research***, 1: 2015012, 2015. In Chinese.

[5] Jia Yuan, Qian-Ming Zhang, **Jian Gao**, Linyan Zhang, Xue-Song Wan, Xiao-Jun Yu & Tao Zhou. Promotion and resignation in employee networks. ***Physica A: Statistical Mechanics and its Applications***, 444: 442–447, 2016.

[4] Mei Xie, Wei Bai, Qinyuan Wu, **Jian Gao** & Tao Zhou. Impact of high-speed railway on economic development. *Journal of UESTC*, 49(6): 891–904, 2020. In Chinese.

[3] Dan-Dan Zhao, An Zeng, Ming-Sheng Shang & **Jian Gao**. Long-term effects of recommendation on the evolution of online systems. ***Chinese Physics Letters***, 30: 8901, 2013.

[2] Fangjian Guo, Jiang Su & **Jian Gao**. Finding conspirators in the network via machine learning. ***The UMAP Journal***, 33(3): 275, 2012. Outstanding paper (MCM/ICM 2011).

[1] **Jian Gao**† & Xi-Nan Zhang. Comprehensive scholarship evaluation model in colleges and universities. *Journal of CTBU*, 29(1): 36–41, 2012. In Chinese. (†: corresponding author).

Conference Paper

[3] Lusi Wu‡, **Jian Gao**‡ & Tao Zhou. The moderated curvilinear relationship between work experience diversity and salary. Proceedings of the 81st Annual Meeting of the Academy of Management (AOM), 2021. HR Division. Online Abstract. (‡: contributed equally)

[2] **Jian Gao**†. Maximizing the collective learning effects in regional economic development. In: *2017 14th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)*, IEEE Press, 2017, pp. 337–341.

[1] Liming Pan, Lei Gao & **Jian Gao**. Link prediction in weighted networks via structural perturbations. In: *2017 14th International Computer Conference on Wavelet Active Media Technology and Information Processing*, IEEE Press, 2017, pp. 5–8.

Book Chapter

[3] **Jian Gao**†, Tao Zhou & Quan-Hui Liu. Computational Socioeconomics: A data-driven framework for quantifying progress towards achieving the Sustainable Development Goals (SDGs). In *Future Cities, New Economy, and Shared City Prosperity Driven by Technological Innovations*, Lei Guo (Eds). United Nations Human Settlements Programme (UN-Habitat): Nairobi GPO KENYA, Ch. 1, pp. 30–43, 2020. In both English & Chinese.

[2] Yi Cao, **Jian Gao** & Tao Zhou. Orderliness of campus lifestyle predicts academic performance: A case study in Chinese university. In *Digital Phenotyping and Mobile Sensing: New Developments in Psychoinformatics*, H. Baumeister & C. Montag (Eds). Springer: Berlin, Germany, Ch. 8, pp. 125–137, 2019.

[1] **Jian Gao**, Linyan Zhang, Qian-Ming Zhang & Tao Zhou. Big data human resources: Performance analysis and promotion/resignation in employee networks. *Social Physics: Social Governance*, Yi-Jun Liu (Eds). Beijing: Science Press, Ch. 4, pp. 38–56, 2014. In Chinese.

Working Papers

Selected Working in Progress

[5] Structural transition of the fundamental science underlying drugs (Lead author; with Yian Yin, Feixiong Cheng & Dashun Wang).

[4] Early science-policy interactions predict a country's effectiveness in containing the COVID-19 pandemic (Lead author; with Yian Yin, Benjamin F. Jones & Dashun Wang).

[3] Research topic diversity and convergence among US research universities (Coauthor; with Yifan Qian, Yian Yin, Benjamin F. Jones, Peter Schiffer & Dashun Wang).

[2] The political mobilization of scientists in the United States (Coauthor; with Alexander C. Furnas, Yian Yin & Dashun Wang).

[1] Does being a jack of all trades pay off? The moderated curvilinear relationship between experience diversity and salary (Coauthor author; with Lusi Wu & Tao Zhou).

Grant Participation

[13] Investigator. Measuring, Understanding, Predicting, and Accelerating Technology Outcomes. Directorate for Technology, Innovation and Partnerships (TIP), National Science Foundation (NSF) (pending review). $5M. PI: Dashun Wang. 2024-2028. (Proposal lead writer)

[12] Key Personnel. Accelerating the Bench-to-Bedside Translation of Biomedical Research. The Pat & Shirley Ryan Family Research Acceleration Fund (pending review). $300K. PI: Dashun Wang. 2023-2024. (Proposal lead writer)

[11] Key Personnel. National Network for Critical Technology Assessment (sub-project). National Science Foundation (NSF) Directorate for Technology, Innovation and Partnerships (TIP). PI: Dashun Wang. 2022-2023. (Proposal lead writer)

[10] Key Personnel. A quantitative framework for estimating the impact of artificial intelligence across scientific disciplines. Supplemental Support for Research Trainees (SSRT) award. The Air Force Office of Scientific Research (AFOSR/RTA). $120K. PI: Dashun Wang. 2022-2023. (Proposal lead writer)

[9] Key Personnel. Developing a quantitative framework to track and assess state-level policy responses to the COVID-19 pandemic. The Peter G. Peterson Foundation Pandemic Response Policy Research Fund. $150K. PI: Dashun Wang. 2021-2023. (Proposal lead writer)

[8] Participant. Perception and prediction of socioeconomic states based on large-scale data about enterprises, human resources, etc. National Natural Science Foundation of China (No. 11975071). $86K. PI: Tao Zhou. 2020-2023. (Proposal lead writer)

[7] Participant. Information confusion in visual analysis of spatio-temporal big data. National Natural Science Foundation of China (No. 61872066). $93K. PI: Jiansu Pu. 2019-2022.

[6] Participant. Relationship between scientific and technological human resources and industrial or economic structure. China Association for Science and Technology (No. 2018ysxh1-4-5-5). $29K. PI: Tao Zhou. 2018-2019.

[5] Participant. Cultural evolution based on complex network analysis. National Natural Science Foundation of China (No. 61703074). $36K. PI: Qian-Ming Zhang. 2017-2019.

[4] Participant. Behavioral pattern analysis of information subject in social networks. National Natural Science Foundation of China (No. 61673086). $23K. PI: Shi-Min Cai. 2017-2017.

[3] Participant. Human space-time coupling behavior. National Natural Science Foundation of China (No. 61603074). $31K. PI: Zhi-Dan Zhao. 2016-2017.

[2] Participant. Performance and behavior predication of employees using big data. National Social Science Foundation of China (No. 15CGL029). $29K. PI: Jia Yuan. 2015-2019.

[1] Participant. Information recommendation in dynamic online system. National Natural Science Foundation of China (No. 61370150). $677K. PI: Ming-Sheng Shang. 2014-2017.

Academic Presentations

2024/04	Class lecture, Information Science at Cornell University (Invited talk)	Zoom
2023/11	The First China Annual Metasciences Conference Metasciences committee of BSTIS (Beijing Science & Technology Information Society) (Invited talk)	Zoom
2023/07	College of Computer Science, Sichuan University (Invited talk)	Chengdu, China
2023/07	Department of Statistics and Data Science, Southern University of Science and Technology (SUSTech) (Invited talk)	Shenzhen, China
2023/07	Faculty of Social Sciences, University of Hong Kong (HKU) (Invited talk)	Hong Kong
2023/06	The 2nd International Conference on the Science of Science and Innovation (ICSSI) (Contributed talk)	Evanston,USA
2023/06	The 2nd ICSSI (Poster presentation)	Evanston, USA

2023/06	National Network for Critical Technology Assessment (NNCTA) Equity and Labor Workshop (Invited talk)	Atlanta, USA
2023/04	Innovation, Policy, and Entrepreneurship, Hong Kong University of Science and Technology (HKUST Guangzhou) (Invited talk)	Zoom
2023/03	Department of Biomedical Informatics and Data Science, School of Medicine, Yale University (Academic Presentation)	Zoom
2021/12	Beijing Technology and Business University (Invited talk)	Zoom
2021/11	Chengdu University of Technology (Invited talk)	Zoom
2021/09	University of Electronic Science and Technology of China (Invited talk)	Zoom
2021/08	Annual Meeting of the Academy of Management (Presented by co-author)	/
2021/01	SWARMA Club: Complexity Science Express Series (Invited talk)	Zoom
2020/11	Northwestern University's COVID-19 Symposia Lightning Talk	Evanston, USA
2020/06	Friday@NICO Seminar (Presented together with Yian Yin)	Evanston, USA
2019/07	Complexity 2019–Complex Science Annual Meeting (Invited talk)	Shanghai, China
2019/05	CNetSci 2019–China Forum of Network Science	Dalian, China
2018/11	AI&S 2018–AI & Society Academic Salon (Invited talk)	Chengdu, China
2018/08	BDSC 2018–National Conference on Big Data & Social Computing	Shijiazhuang, China
2018/08	CCDM 2018–China Conference on Data Mining	Jinan, China
2018/01	NetSciX 2018–International School and Conference on Network Science	Hangzhou, China
2017/04	AAG 2017–Economic Geography Sessions	Boston, USA
2017/01	B4 Event–Universidad del Desarrollo	Valparaiso, Chile
2016/03	Interdisciplinary Complex Systems Science Seminar in BU	Boston, USA
2015/10	Symposium on Complexity Science in SWUST	Mianyang, China
2015/06	The Statistical Physics and Complex Systems Conference	Lanzhou, China
2015/06	Symposium of China Inter-discipline Association for Complex Economy	Yantai, China
2014/10	The 10th Chinese Conference on Complex Networks	Changsha, China
2014/07	The 2nd Academic Conference on Complexity Science	Wenzhou, China
2013/10	The 9th Chinese Conference on Complex Networks	Hangzhou, China

Selected Awards, Honors, & Scholarships

Awards

2022	**Outstanding Reviewer Award** 2021, Journal of Physics: Complexity	(Top 4)
2021	**Best Reviewer Award**, TIM Division, Academy of Management Annual Meeting	/
2020	EPL Highlights of 2019, corresponding author for *EPL* 125 (2019) 68002	/
2018	Best Poster Award in the 2018 NetSciX Conference on Network Science	(Top 6)
2014	Best Poster Award in the 2nd Conference on Complexity Science	(Top 3)
2012	**Outstanding Winner** in 2012 Interdisciplinary Contest in Modeling (ICM) *COMAP, sponsored by SIAM, NSA and INFORMS*	(0.3%)
2010	Second Prize in National Mathematical Contest in Modeling (MCM)	(5%)

Honors

2019	**Provincial Excellent Graduate Student**, *Education Department in Sichuan*	(1%)
2019	University Excellent Graduate Student, *UESTC*	(5%)
2012	University Excellent Undergraduate Student, *UESTC*	(7%)
2011	**Outstanding Student of the University**, *UESTC* *awarded by the chancellor's office, top 10 undergraduates, the university highest honor*	(0.2%)

Scholarships

2014-2019	University Education Foundation & Tang Lixin Scholarship, *UESTC*	(0.5%)
2016	**National Scholarship for Graduate Student**, *Ministry of Education*	(5%)
2016	First-class Scholarship for Graduate Student, *UESTC*	(5%)
2016-2017	CSC Scholarship, *China Scholarship Council (CSC) & Ministry of Education*	/
2012-2014	University Graduate Student Scholarship, *UESTC*	(10%)
2009-2011	National Inspiration Scholarship, *Ministry of Education*	(5%)

Peer Review & Academic Services

♢ Web of Science Verified Peer Reviews: 195 times for 130 manuscripts

♢ Average Length of Review Reports: 800 words (according to Web of Science Publons)

Journal Reviewer

General Audience	Nature (2024–), Nature Human Behaviour (2023–), Nature Communications (2022–), Journal of the Royal Society Interface (2018–), Research (2021–), Royal Society Open Science (2021–), Heliyon (2019–), Patterns (2020–), Scientific Reports (2020–), PLoS ONE (2019–), EPJ Data Science (2023–)
Social/Economy	Frontiers in Psychology (2020–), Frontiers in Public Health (2021–), Area Development and Policy (2019–), Marine Policy (2019–), Socio-Economic Planning Sciences (2021–), Sustainability (2021–), Healthcare (2021–), Merits (2021–), Environment and Planning A: Economy and Space (2022–), Journal of Economic Geography (2023–), California Management Review (2024–), Regional Studies (2023–), Academy of Management (AOM) Annual Meeting (2021–)
Physics/Maths	Journal of Physics: Complexity (2020–), Complexity (2020–), Entropy (2021–), International Journal of Modern Physics C (2018–), Physica Scripta (2018–), Physics Letters A (2017–), Physica A: Statistical Mechanics and its Applications (2016–), Network Science (2021–), Chinese Physics B (2021–), Chaos (2021–), PLoS Biology (2020–), Proceedings of the Royal Society A (2024–)
Computer/Information	Information Sciences (2020–), Knowledge-Based Systems (2017–), IEEE Transactions on Knowledge and Data Engineering (2016–), Social Network Analysis and Mining (2020–), Expert Systems With Applications (2021–), Collective Intelligence (2021–), International Journal of Automation and Computing (2020–), Journal of Computer Science and Technology (2021–), Journal of King Saud University - Computer and Information Sciences (2021–), AI & SOCIETY (2020–), IEEE Access (2019–), Computer Standards and Interface (2017–), Journal of Computational Methods in Sciences and Engineering (2017–)

Editorial Board

Guest Associate Editor, *Frontiers in Physics* (Social Physics section)	2021–2022
Guest Editor, *Frontiers in Education* (Higher Education section)	2021–2022

Grant Reviewer

National Science Foundation (NSF), Division of Social and Economic Sciences	2022-2023

Teaching Experiences

Spring 2022	Teaching Assistant, Social Dynamics and Network Analysis (MORS 457) MBA course at Kellogg School of Management, Northwestern University	NU
Fall 2020	Teaching Assistant, Social Dynamics and Network Analysis (MORS 457) MBA course at Kellogg School of Management, Northwestern University	NU
Spring 2018	Invited Lecturer, Computational Socioeconomics (School of Statistics) Graduate-level course at Southwestern University of Finance and Economics	SWUFE

Fall 2013 Teaching Assistant, Calculus I (School of Mathematical Sciences) UESTC
Undergraduate-level course at University of Electronic Science and Technology of China

Fall 2012 Teaching Assistant, Mathematical Modeling (School of Mathematical Sciences) UESTC
Undergraduate-level course at University of Electronic Science and Technology of China

Industry Experiences

2018-2019 Research Intern. Institution of New Economic Development (iNED) Chengdu, China

2015-2016 Research Intern. Business Big Data (BBD) Technology Ltd. Chengdu, China

2013-2014 Research Intern & Algorithm Engineer. Hire Big Data Ltd. Chengdu, China

Selected Media Coverage

2021 Paper "Potentially long-lasting effects of the pandemic on scientists" (*Nature Communications*) was covered in *Science* (Careers), *Nature* (News), newspapers, and blogs:

- *Science*: The pandemic's slowing of research productivity may last years—especially for women and parents. By Jyoti Madhusoodanan. In print: "Pandemic productivity dip may linger." *Science* 374(6567), 519-519 (2021).

- *Nature*: The COVID pandemic has harmed researcher productivity – and mental health. By Dyani Lewis. In print: "Pandemic takes its toll on researcher productivity and mental health." *Nature* 599(7885), 353-353 (2021).

- *Scientific American*: A high-speed scientific hive mind emerged from the COVID pandemic. By Joseph Bak-Coleman, Carl T. Bergstrom.

- *Forbes*: The bad news, good news, bad news about COVID's impact on scientific research. By Brian Uzzi.

- *Physics World*: New non-COVID research projects plunge by a third since the start of the pandemic. By Ian Randall.

- *The Horizons Tracker*: The impact of COVID on the research community could last many years. By ADI.

- *Northwestern Now News*: Pandemic's effect on scientists may be long lasting, study finds. By Amanda Morris.

- *The Daily Northwestern*: Kellogg studies find COVID-19 will have long-term impacts on research. By Skyler Zur.

- *Northwestern Kellogg Insight*: How Has Covid-19 shaped scientists—and the future of science? By Emily Stone.

2021 Paper "Coevolution of policy and science during the pandemic" (*Science*) was covered in news and blogs:

- *The Scientist*: WHO leads in using solid science to draft COVID-19 policy: Study? By Max Kozlov.

- *Science Magazine*: Policymakers draw heavily from highly cited COVID-19 science. By SCIENCE NEWS.

- *Northwestern Kellogg Insight*: How well does COVID public policy align with science? By Sachin Waikar.

- *FROMTBOT*: Are our COVID 19 policies grounded in quality science? By Sunaina Rao.

2019 Paper "Computational socioeconomics" (*Physics Reports*) was covered in news and blogs:

- *Science Net*: From archive to computational socioeconomics. In Chinese. By Minqi Hu.

- *Sichuan Observer*: Applying big data to social science research. In Chinese. By Huan Li.

- *Swarma Club*: Computational socioeconomics provides interdisciplinary insights social and economic development. In Chinese. By Leo.

2019 Paper "Orderliness predicts academic performance: Behavioral analysis on campus lifestyle" (*Journal of the Royal Society Interface*) was covered in news and blogs:

- *Teach Wire Daily*: Does orderliness predict academic success? By Gordon Cairns.

- *China Daily*: Students with higher GPAs tend to eat breakfast more often. By Zhang.

- *New Scientist*: China's uniform approach for students is a bad fit for other countries. By Michael Brooks.

- *Science and Technology Daily*: 'Real Hammer' to student's laziness: Study suggests regular lifestyle benefits academic development. In Chinese. By Li Sheng.

- *Chengdu Economic Daily*: Who is easier to become a scholar. In Chinese. By Zunsu Yu.

- *The Beijing News*: High-achieving students more likely to eat breakfast, study shows. In Chinese. By Zheng Ai.

- *Science Net*: Say goodbye to "slack": Regular campus lifestyle may help academic development. In Chinese. By Weijia Cheng.

2018 Paper "Height conditions salary expectations" (*Physica A*) was covered in *Merry for Money*, *Science Net Research Blog* (in Chinese), and *Sohu Blog* (in Chinese).

2017 Correspondence opinion piece "Stamp out fake peer review" (*Nature*) was replied by Springer Nature (Tamara Welschot. Springer Nature's reply on fake review. *Nature*, 546(7657): 210-210, 2017) and was covered in *UESTC News* (in Chinese).

2016 Paper "Promotion and resignation in employee networks" (*Physica A*) was covered in *Collazo & Keil Blog* and *Science Net Research Blog* (in Chinese).

Computer and Communication Skills

Computing	Python, Stata, MATLAB, R	♢ Visualization: AI, D3, Gephi, OriginLab
Language	English (fluent), Chinese Mandarin (native)	♢ Typesetting: LaTeX, MS Office, Markdown